e-Dorado: The Lost Centric City of Information

My last BACKTALK article, *Transform This*, in the May 2006 issue of CROSSTALK, addressed the clarion call of transformation within the Department of Defense (DoD). This month, I tackle the *Holy Grail* of the transformation crusade: Net-Centricity. First, a parallel look at crusades and exploration.

In their quest for El Dorado, Spanish conquistadors documented large populations and great cities along the banks of the Amazon River. For 500 years, explorers and archeologists have been probing Brazil for traces of the lost cities of the Amazon. One of the more obsessed explorers was British archaeologist, Col. Percy Harrison Fawcett. Col. Fawcett was a surveyor in the British secret service and friend of Arthur Conan Doyle who later used his stories as inspiration for his work "Lost World."

Fawcett led seven expeditions up the Amazon River basin between 1906 and 1924 for the Royal Geographic Society. Fawcett studied ancient maps, legends, and records and was convinced there was a lost city somewhere in the Mato Grosso region of Brazil. In 1925, Fawcett took his son Jack and Jack's friend Raleigh Rimmell with him to look for a lost city he named Z. Jack depicted Z in his sketches as a large statuesque city of stone rising out of the jungle.

Fawcett sent a telegraph on May 29, 1925 to his wife explaining that he was going into unexplored territory. The three men were last seen crossing the upper Xingu, a southeastern tributary of the Amazon River. They were never heard from again. No sightings, no messages, no remains, and no city were found unless you talk to University of Florida anthropologist Michael Heckenberger.

Heckenberger's University of Florida team used maps, a Global Positioning System (GPS), and knowledge from members of the indigenous Kuikuro tribe to identify and map out 19 villages into two large clusters within a 386 square mile area where Fawcett disappeared.

Overgrown by jungle, the villages connect by roads some 50 yards wide in a grid-like pattern around a hub dotted with causeways, plazas, and other structures. The biggest villages included 200-acre residential areas, and the clusters supported populations of 2,500 to 5,000. The entire area in and between major settlements was carefully engineered and managed. Heckenberger believes the network of villages is one of the lost cities of the Amazon.

How did relentless explorers and enlightened scientists miss the cities beneath their feet? Ironically, their myopic vision of stone cities rising vertically up from the jungle floor obscured the possibility of an indigenous metropolis extending horizontally out into the jungle.

Fast forward to the 21st century and we find the DoD searching for a new city. The Office of the Secretary of Defense describes a net-centric city of information as:

> ... an information superiority-enabled concept of operations that generates increased combat power by networking censors, decision-makers and shooters to achieve shared awareness, increased speed of command, higher tempo of operations, greater lethality, increased survivability and a degree of self synchronization. [1]

This modern-day e-Dorado with a boatload of *ilities* sounds nice, but can it be done?

Net-centric technology is available, sound, and used commercially. Will it flourish in the defense community or succumb to parochial natives and bureaucratic overgrowth, disappearing into a jungle of politics? I am not sure, but here are some questions to explore. Net-centric success depends on a clearly defined vision or architecture. Col. Fawcett entered the jungle with scant notes and his son's drawings. Fawcett's myopic drive to find a stone city rising up from the jungle floor blinded his mind to the possibility of a network of villages that meet all the criteria of a thriving metropolis. Is there clarity in the DoD's net-centricity vision? Does the vision inspire, motivate, and enlighten or does it offer a list of platitudes? Does the vision allow for unconventional solutions? As with all technology adoption, the DoD will need to bridge the gap of doubt from concept to implementation. Is it a wobbly bridge of rope or a bridge over the river Kwai?

Net-centric success will depend on collaboration between the innovative roots of the armed Services and the canopy of defense leadership on a scale never achieved before. Comparing Fawcett to Heckenberger, I see two striking differences that stand out: The most obvious is Heckenberger's technological advantage in gear, maps, and GPS.

Less obvious is Heckenberger's resolute respect for the local natives by living with and helping them first. Fawcett, on the other hand, offered trinkets and gifts for native support. While initially effective, Fawcett's trinkets washed away while crossing a raging river. Heckenberger's partnership proved more stable and long lasting. Likewise, any technological advancement – while inspired and funded from the top – will come from the grassroots of each service. Can DoD leaders go beyond a funding relationship and establish stable, long-term partnerships with the native roots of innovation within the Army, Navy, and Air Force?

Finally, net-centric success depends on collaboration between the DoD and its suppliers. Defense contractors, which name I am sure derives from the word conquistador, naturally see net-centricity as a source of contractual gold. Marching through the acquisition jungle with brute force in quest of e-Dorado, contractors can lose sight of the desires of the natives, chiefs, and communities they serve. Rather than blaming conquistadors for being conquistadors, can the DoD harness the contractor's aggression, zeal, and force to meet net-centric goals?

Will net-centric warfare become reality? No doubt, the telegraph has been sent: We have crossed the upper Xingu into unexplored net-centric territory. The last question: Will we be lost in overgrown jungles of parochialism, bureaucracy, and politics or emerge with shared awareness, higher tempo of operations, greater lethality, and increased survivability? Lace up your boots and sharpen your machete. Lost cities are lost only because they have not been found.

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Reference

1. Office of the Secretary of Defense. "Transforming America's Mlitary: Net-Centric Warfare." Washington, D.C.: 2005.